REMARKS

Applicants concurrently file herewith an Excess Claim Fee Payment Letter, and corresponding excess claim fee, for three (3) excess claims.

Claims 1-24 are all of the claims presently pending in the application. Claims 1, 6, 7, 9, 10, 12 and 13 have been amended to more particularly define the invention. Claims 22-24 have been added to claim additional features of the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-7, 9-15, and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Renslo et al. (U.S. Patent No. 5,446,890; hereinafter "Renslo"). Claims 8 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Renslo (U.S. Patent No. 5,446,890) in view of Lu et al. ("Effective Data Mining Using Neural Networks"; hereinafter "Lu"). Claims 17 and 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Renslo in view of Bieganski et al. (U.S. Patent No. 6,412,012; hereinafter "Bieganski").

These rejections are respectfully traversed in the following discussion.

I.   THE CLAIMED INVENTION

The claimed invention (e.g., as defined by exemplary claim 1) is directed to a computer method that includes providing a demand database including a compendium of individual demand history, providing a supply database including a compendium of at least one of product stockpile management solutions, product stockpile information, and product stockpile diagnostics, employing a data mining technique for interrogating the demand and supply databases for generating an output data stream, the output data stream correlating a demand problem with a supply solution, updating at least one of the demand database and the supply database, and refining the data mining technique in cognizance of pattern changes embedded in the demand database and the supply database as a consequence of updating the at least one of the demand database and the supply database.

Conventional methods for product stockpile management are largely subjective, human-based methods and are therefore exposed to all of the deficiencies otherwise attendant

on human procedures. A stockpile manager develops a demand database relating to historical

supply situations, then develops in its mind a supply database from personal knowledge, and

then subjectively correlates in its mind the necessarily incomplete and partial supply database,

with the demand database.

The claimed invention of exemplary claim 1, on the other hand, provides a computer

method that includes providing a demand database including refining the data mining

technique in cognizance of pattern changes embedded in the demand database and the supply

database as a consequence of updating the at least one of the demand database and the supply

database (e.g., see Application at page 4, lines 10-13). This combination of features allows

the claimed invention to use data mining techniques to solve the problem of product stockpile

management (see Application at page 7, lines 1-11).

II.   THE PRIOR ART REFERENCES

A.   The Renslo Reference

The Examiner alleges that Renslo teaches the claimed invention of claims 1-7, 9 10-15

and 18. Applicants submit, however, that there are elements of the claimed invention, which

are neither taught nor suggested by Renslo.

That is, Renslo does not teach or suggest *"refining the data mining technique in*

cognizance of pattern changes embedded in said demand database and said supply database

as a consequence of updating the at least one of said demand database and said supply

database" as recited in claim 1 and similarly recited in claims 9, 10 and 13.

The Examiner attempts to rely on column 7, lines 47-50 and column 8, lines 40-55 of

Renslo to support his allegations. The Examiner, however, is clearly incorrect.

That is, nowhere in these passages (nor anywhere else for that matter) does Renslo

teach or suggest a computer method that includes refining the data mining technique in

cognizance of pattern changes embedded in the demand database and the supply database as a

consequence of updating at least one of the demand database and the supply database. Indeed,

Renslo merely teaches updating the knowledge base to change the generated forecasts.

Renslo teaches a forecasting system that provides a forecast of a factory's product

demand. The forecasting system generates forecasts using a forecasting algorithm and a

knowledge base (20,22) (which the Examiner has analogized to the data mining technique of

the present invention). The forecasting system also includes a relational database (26), which

contains all of the product and forecast information, as well as order history and forecast results (see column 4, lines 7-9).

The forecasting system in Renslo further provides an updating means that updates the relational database (26) and updates the rules stored in the knowledge base (20,22). Renslo teaches that updating the rules in the knowledge base (20,22) results in changing the forecasts generated by the forecasting system (see Renslo at column 7, line 52 through column 8, line 2). That is, Renslo teaches updating the relational database (26) and the knowledge base (20,22) and that, based on this updating, the results generated by the system are changed.

Assuming, *arguendo*, that the knowledge base of Renslo teaches the claimed data mining technique, nowhere does Renslo teach or suggest refining the data mining technique in cognizance of pattern changes embedded in the demand database and the supply database as a consequence of updating at least one of the demand database and the supply database. The knowledge base of Renslo is not updated based on changes made to the relational database. Renslo merely teaches updating the rules stored in the knowledge base. However, the updating of the knowledge base rules is not based on changes made to the relational database of Renslo.

Furthermore, while the forecasting results of Renslo are changed based on the updates to the relational database and the knowledge base, this does not teach or suggest "*refining the data mining technique*" as recognized by exemplary aspects of the claimed invention. That is, altering the results obtained using the forecasting algorithm does not teach or suggest refining the forecasting algorithm itself.

Moreover, Renslo does not teach or suggest "*adding a product to a recommended product stockpile if the data mining technique determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database*" as recited in exemplary dependent claims 19-21. Indeed, the Examiner does not even allege that Renslo teaches or suggests this feature.

Therefore, Applicants submit that there are elements of the claimed invention that are not taught or suggest by Renslo. Therefore, the Examiner is respectfully requested to withdraw this rejection.

B.   The Lu Reference

The Examiner alleges that Lu would have been combined with Renslo to form the

claimed invention of claims 8 and 16. Applicants submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Indeed, these references are directed to different problems and solutions. Specifically, Renslo is directed to the integration of a knowledge base with an automatically updated database to create optimized forecasting results (see Renslo at column 1, lines 60-66), whereas Lu is merely directed to applying neural networks to mine classification rules for large databases (see Lu at page 957). Therefore, these references are completely unrelated, and a person of ordinary skill in the art, attempting to improve Renslo, would have no reasonable motivation to consult the disparate reference Lu, absent impermissible hindsight.

Furthermore, the Examiner's motivation to modify Renslo ("in order to have better a better predict result") is not a problem in Renslo that would require a solution. Furthermore, Lu does not teach or suggest that neural networks provide improved results over knowledge bases.

Thus, as pointed out in MPEP 2143.01, the Examiner's motivation is "improper". That is, "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination" (emphasis in MPEP itself).

Moreover, neither Renslo nor Lu, nor any combination thereof, teaches or suggests "refining the data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the at least one of said demand database and said supply database" as recited in claim 1 and similarly recited in claims 9, 10 and 13.

The Examiner attempts to rely on pages 957-961 of Lu to support his allegations. The Examiner, however, is clearly incorrect.

That is, nowhere in this passage (nor anywhere else for that matter) does Lu teach or suggest a computer method that includes refining the data mining technique in cognizance of pattern changes embedded in the demand database and the supply database as a consequence of updating at least one of the demand database and the supply database. Indeed, the Examiner does not even allege that Lu teaches or suggests this feature. The Examiner merely relies upon Lu as teaching the technique of using neural networks for data mining. Thus, Lu fails to make up for the deficiencies of Renslo.

Moreover, neither Renslo nor Lu, <u>nor any combination thereof,</u> teaches or suggests *"adding a product to a recommended product stockpile if the data mining technique determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database"* as recited in exemplary dependent claims 19-21. Indeed, the Examiner does not even allege that Lu teaches or suggests this feature.

Therefore, Applicants submit that these references would not have been combined as alleged by the Examiner and, even if combined, the alleged combination would not teach or suggest each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

C.   The Bieganski Reference

The Examiner alleges that Bieganski would have been combined with Renslo to form the claimed invention of claims 17 and 19-21. Applicants submit, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Indeed, these references are directed to different problems and solutions. Specifically, Renslo is directed to <u>the integration of a knowledge base with an automatically updated database to create optimized forecasting results</u> (see Renslo at column 1, lines 60-66), whereas Bieganski is merely directed to <u>generating a compatibility-aware recommendation output set based on a set of item compatibility rules</u> (see Bieganski at page 957). Therefore, these references are completely unrelated, and a person of ordinary skill in the art, attempting to improve Renslo, would have no reasonable motivation to consult the disparate reference Bieganski, <u>absent impermissible hindsight</u>.

Furthermore, the Examiner's motivation to modify Renslo ("in order to provide a system with the ability to recommend items based on the compatibility of a new item with items already on the recommendation list") <u>is not a problem</u> in Renslo that would require a solution. That is, there is no teaching in Renslo that would provide any reasonable motivation or reason to include a recommendation list, as taught in Bieganski.

Thus, as pointed out in MPEP 2143.01, the Examiner's motivation is "improper". That is, "the mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination"

(emphasis in MPEP itself).

Moreover, neither Renslo nor Bieganski, nor any combination thereof, teaches or suggests *"refining the data mining technique in cognizance of pattern changes embedded in said demand database and said supply database as a consequence of updating the at least one of the demand database and the supply database"* as recited in claim 1 and similarly recited in claims 9, 10 and 13.

The Examiner attempts to rely on column 4, lines 65-67; column 5, lines 1-4; column 6, lines 13-17; column 7, lines 35-40 and column 10, lines 37-50 of Bieganski to support his allegations. The Examiner, however, is clearly incorrect.

That is, nowhere in this passage (nor anywhere else for that matter) does Bieganski teach or suggest a computer method that includes refining the data mining technique in cognizance of pattern changes embedded in the demand database and the supply database as a consequence of updating at least one of the demand database and the supply database. Indeed, the Examiner does not even allege that Bieganski teaches or suggests this feature. The Examiner merely relies upon Bieganski as teaching adding a product to a recommended product stockpile if the data mining technique determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database. Thus, Bieganski fails to make up for the deficiencies of Renslo.

Moreover, neither Renslo nor Bieganski, nor any combination thereof, teaches or suggests *"adding a product to a recommended product stockpile if the data mining technique determines there is a match between a classification of a demand feature from the demand database and a classification of a demand feature from the supply database"* as recited in exemplary dependent claims 19-21.

Contrary to the Examiner's allegations, Bieganski does not teach or suggest "a match between a classification or a demand feature from the demand database and a classification of a demand feature from the supply database", as recognized by an exemplary aspect of the claimed invention. Bieganski merely teaches reviewing past purchases, current purchases or user preferences of a customer. However, nowhere does Bieganski teach or suggest matching this information to a classification of a feature in a supply database. That is, nowhere does Bieganski even mention a supply database in the description of the invention.

Furthermore, it does not appear that the Examiner has even discovered a supply

database in Bieganski. This is evident by the Examiners' conclusory rejection, quoting the language recited in the claimed invention and listing long citations of the references that do not specifically compare the elements of the claimed invention to features in the cited reference.

Therefore, Applicants submit that these references would not have been combined as alleged by the Examiner and, even if combined, the alleged combination would not teach or suggest each and every feature of the claimed invention.   Therefore, the Examiner is respectfully requested to withdraw this rejection.

III.   NEW CLAIMS

New claims 22-24 have been amended to provide more varied protection for the claimed invention and to claim additional features of the invention. These claims are independently patentable because of the novel features recited therein.

Applicants respectfully submit that new claims 22-24 are patentable over any combination of the applied references at least for analogous reasons to those set forth above with respect to claims 1-21.

IV.   FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicants submit that claims 1-24, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

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   The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

                Respectfully Submitted,

Date: *March 9, 2005*
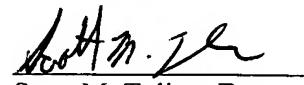
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